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Hopf categories

We introduce Hopf categories enriched over braided monoidal categories. The notion is linked to several recently developed notions in Hopf algebra theory, such as Hopf group (co)algebras, weak Hopf algebras and duoidal categories. We generalize the fundamental theorem for Hopf modules and some of its applications to Hopf categories. We discuss Hopf-Galois theory for Hopf categories.

REFERENCES:

- [1] E. Batista, S. Caenepeel, J. Vercruysse, Hopf categories, *Algebr. Represent. Theory* 19 (2016), 1173–1216.
- [2] S. Caenepeel, T. Fieremans, Descent and Galois theory for Hopf categories, *J. Algebra Appl.*, in press.

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